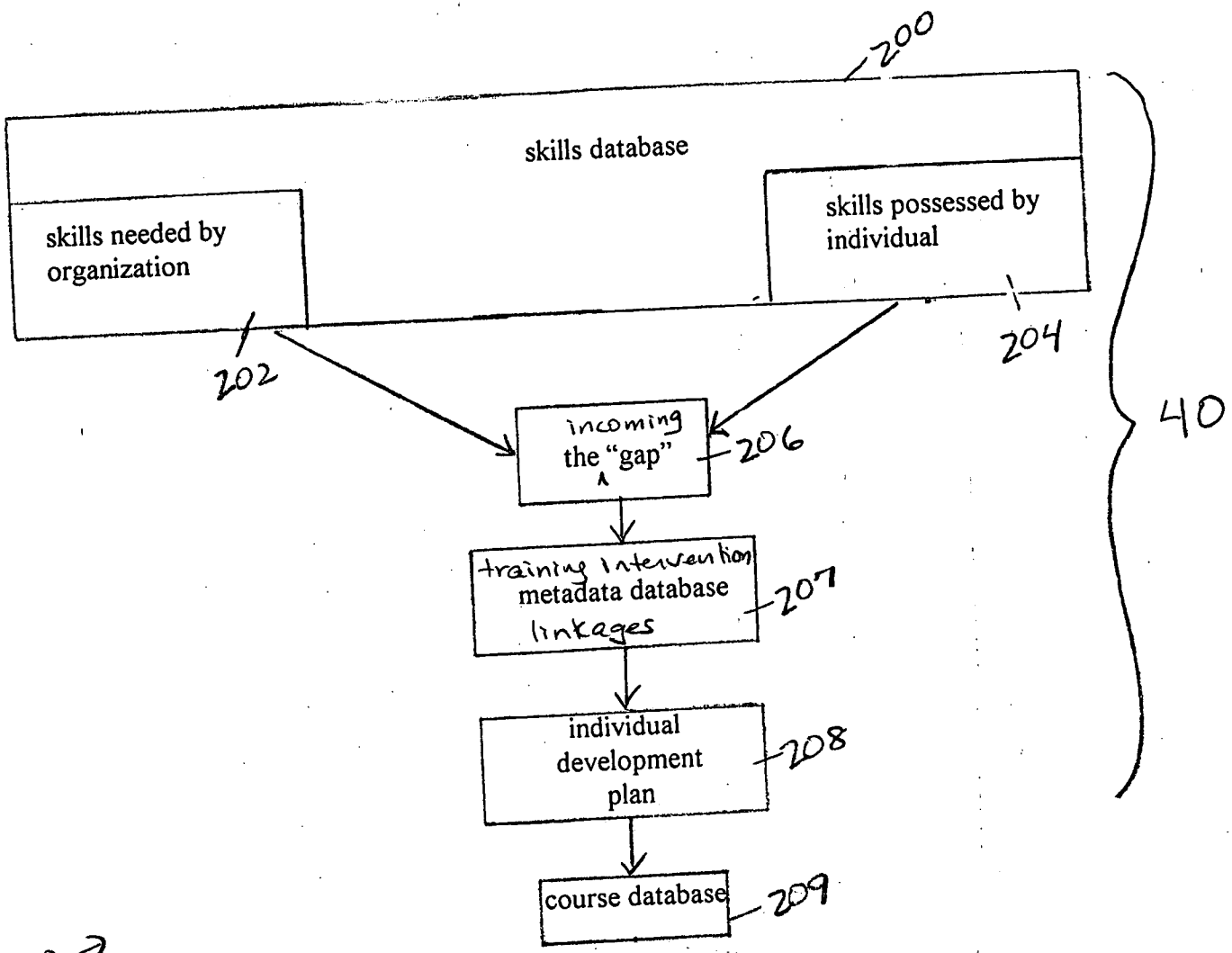

200
skills database
skills needed by organization
skills possessed by individual
202
204
incoming the "gap"
206
40
training intervention metadata database linkages
207
individual development plan
208
course database
209
10

FIG. 1B

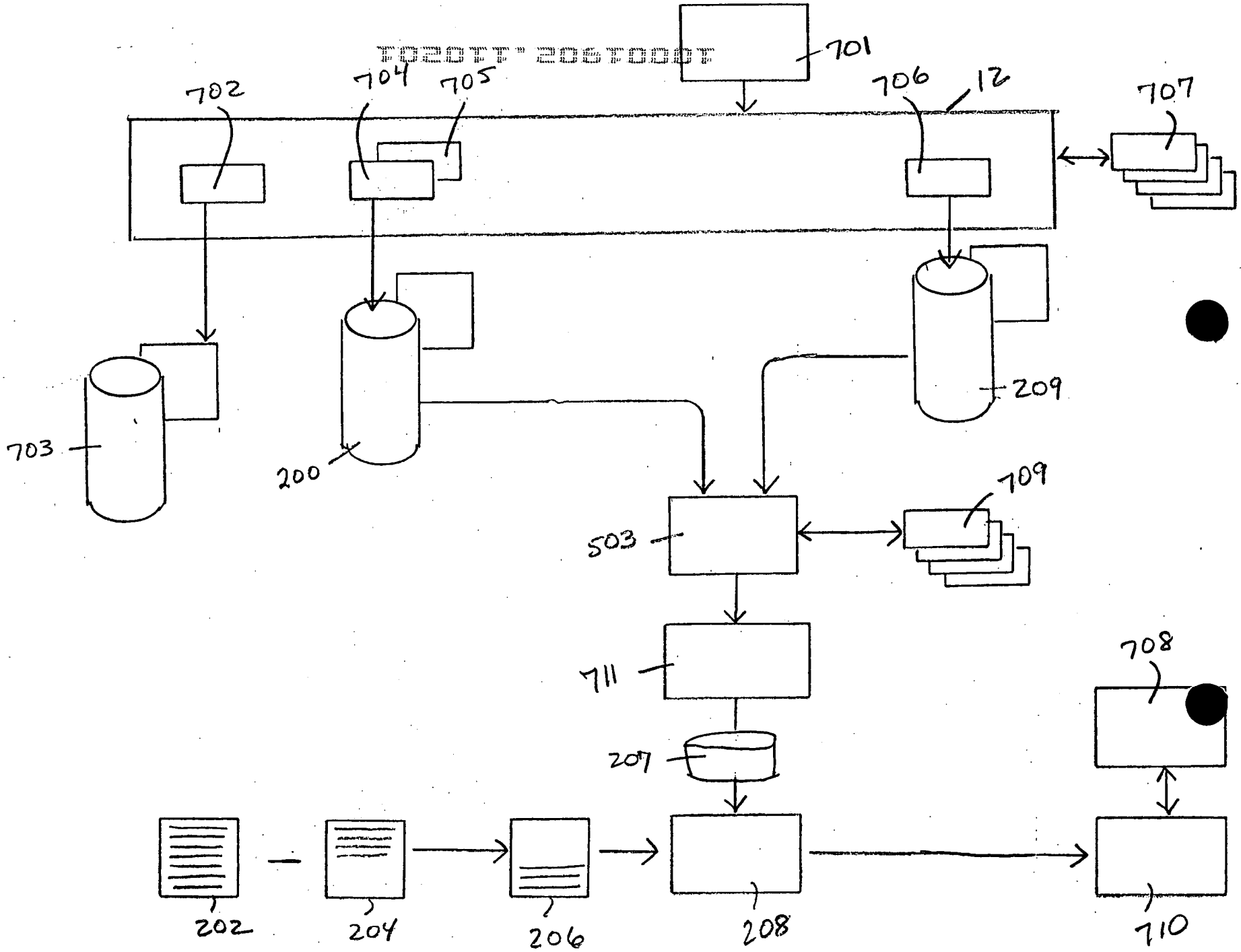

701
702
704
705
706
12
707
703
200
209
709
503
711
708
207
202
204
206
208
710

FIG. 1C

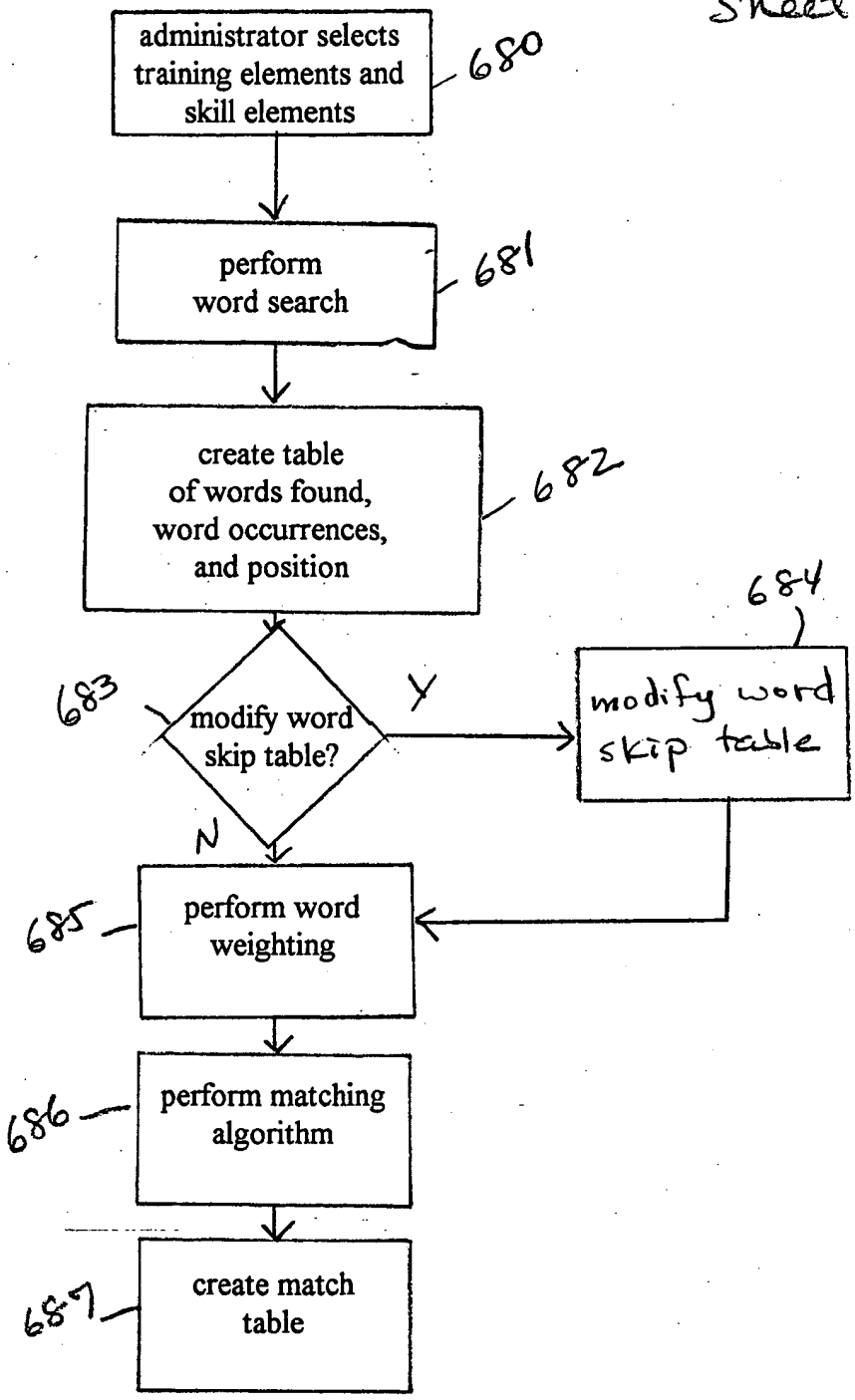

administrator selects training elements and skill elements
680
perform word search
681
create table of words found, word occurrences, and position
682
683
modify word skip table?
Y
684
modify word skip table
N
685
perform word weighting
686
perform matching algorithm
687
create match table

FIG. 1D

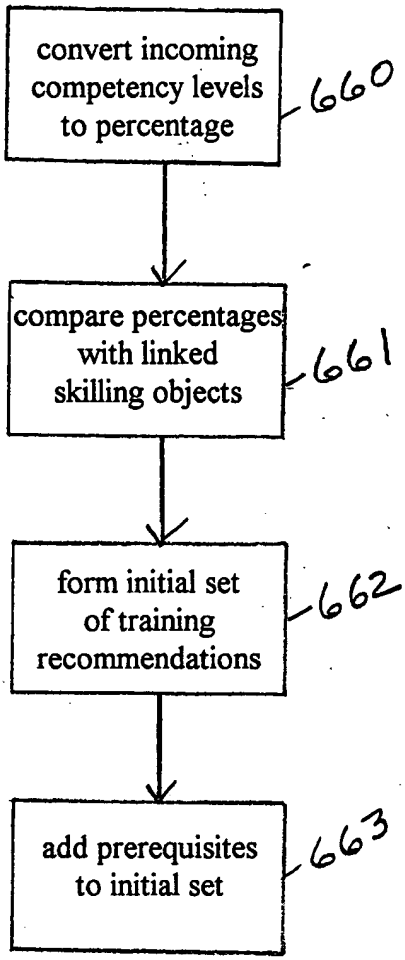

convert incoming competency levels to percentage
660
compare percentages with linked skilling objects
661
form initial set of training recommendations
662
add prerequisites to initial set
663

FIG. 1E

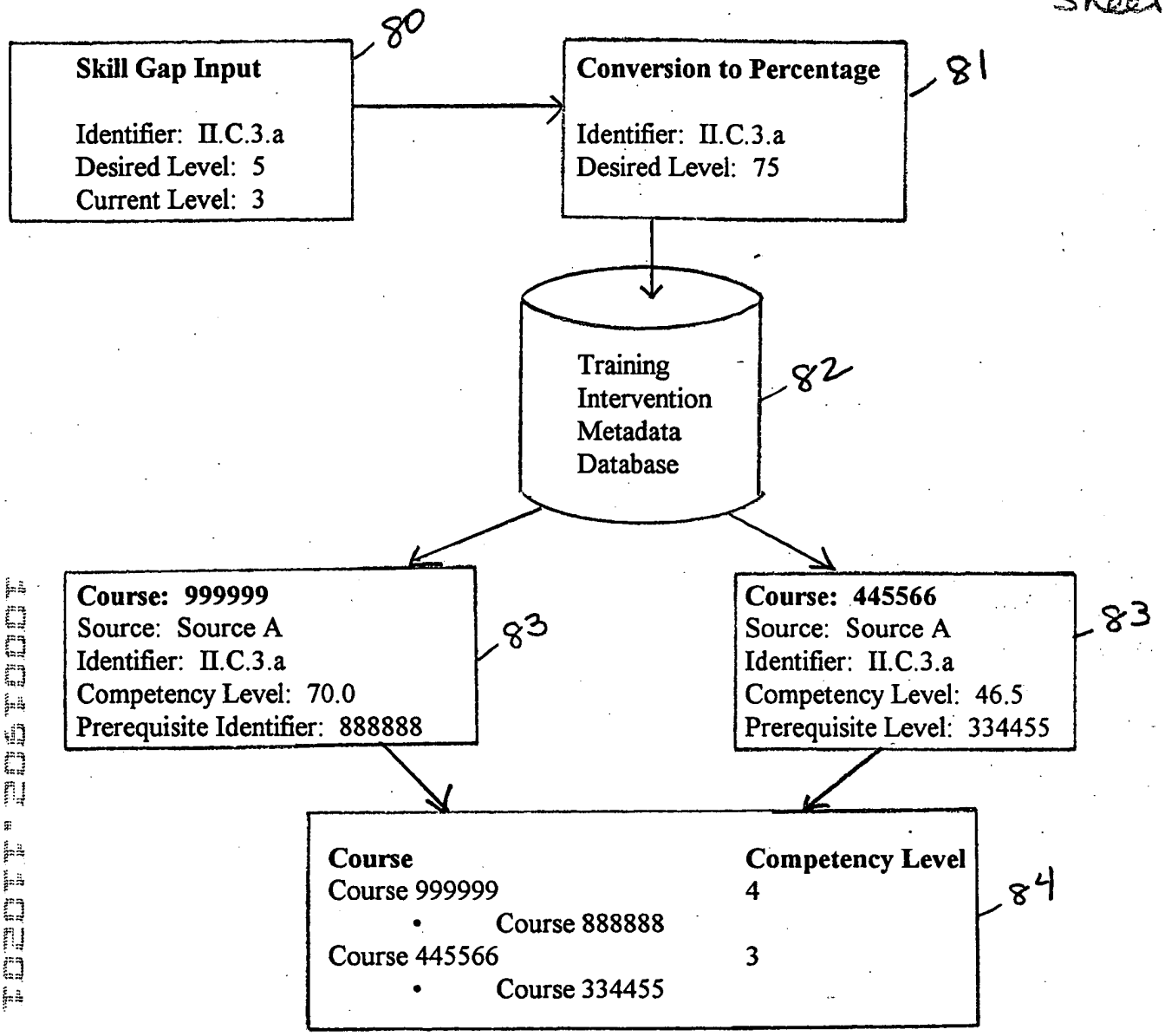
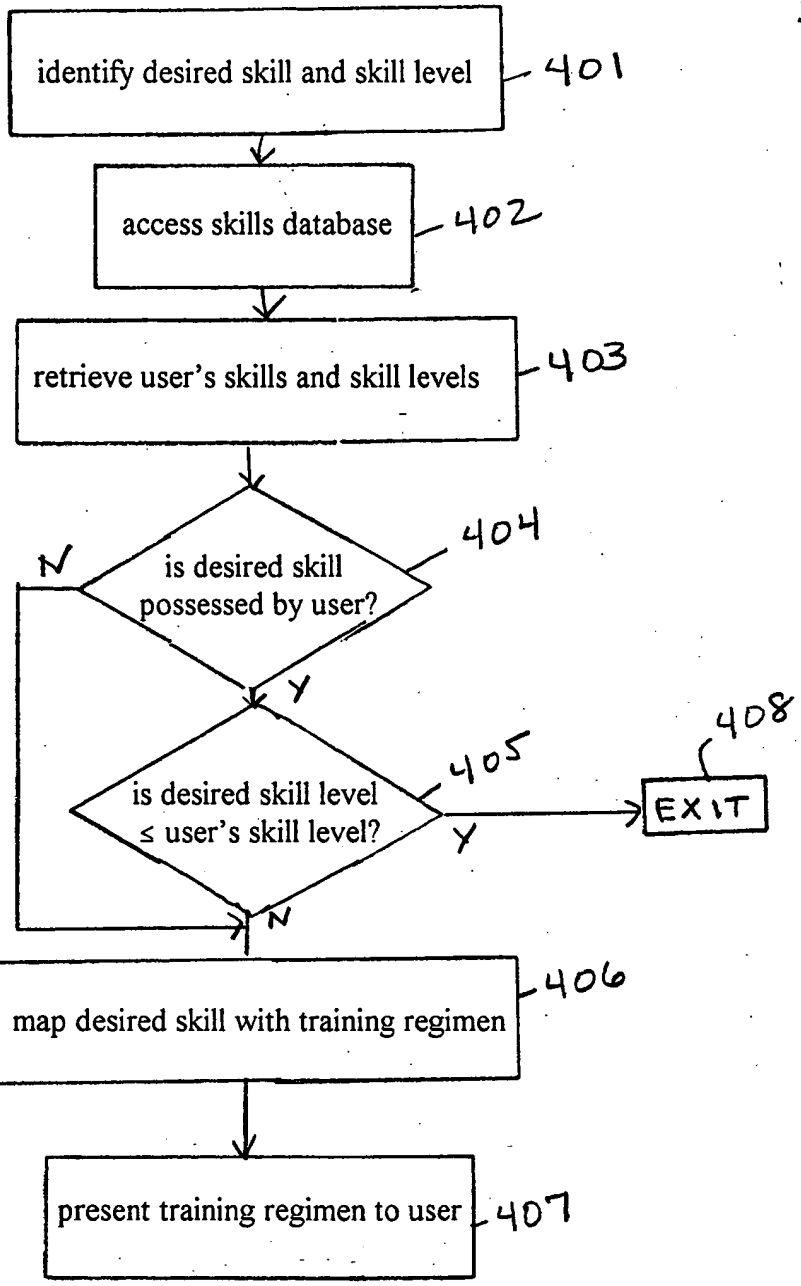

Skill Gap Input
Identifier: II.C.3.a
Desired Level: 5
Current Level: 3
80
Conversion to Percentage
Identifier: II.C.3.a
Desired Level: 75
81
Training Intervention Metadata Database
82
Course: 999999
Source: Source A
Identifier: II.C.3.a
Competency Level: 70.0
Prerequisite Identifier: 888888
83
Course: 445566
Source: Source A
Identifier: II.C.3.a
Competency Level: 46.5
Prerequisite Level: 334455
83
Course
Competency Level
Course 999999
4
• Course 888888
Course 445566
3
• Course 334455
84

FIG. 1F


identify desired skill and skill level
401
access skills database
402
retrieve user's skills and skill levels
403
is desired skill possessed by user?
404
N
Y
is desired skill level ≤ user's skill level?
405
Y
N
408
EXIT
map desired skill with training regimen
406
present training regimen to user
407

400

FIG. 2

Data comprising user's skills and current and desired skill levels:

411 skills possessed by user	412 current skill level	413 desired skill level
Skill 1	2	4
Knowledge 1	1	5
Knowledge 3	2	4
Skill 2	3	4
Knowledge 2	4	3

41

Data comprising skills "gap":

421 skills	422 current skill level	423 desired skill level
Skill 1	2	4
Skill 2	3	4
Knowledge 1	1	5
Knowledge 3	2	4

42

FIG. 3B

FIG. 3A

FIG. 3A

Data comprising training map:

431 skills	432 skill level achievable	433 course available
Skill 1	1	Course DA
Skill 1	3	Course DB
Skill 2	4	Course DC
Knowledge 1	1	Course AA
Knowledge 1	2	Course FA
Knowledge 1	3	Course AB
Knowledge 1	4	Course FB
Knowledge 1	5	Course AC
Knowledge 2	1	Course BA
Knowledge 2	3	Course BB
Knowledge 2	5	Course BC
Knowledge 3	1	Course CA
Knowledge 3	4	Course CB

43

Data resulting from mapping to yield recommended training regimen:

441 required skill	442 recommended course
Skill 1	Course DB
Skill 2	Course DC
Knowledge 1	Course AA
Knowledge 1	Course AB
Knowledge 1	Course AC
Knowledge 3	Course CB

Knowledge 1 → Skill 2 (Course FA → Course DC)

Knowledge 1 → Knowledge 1 (Course FB → Course AB)

44

FIG. 3B

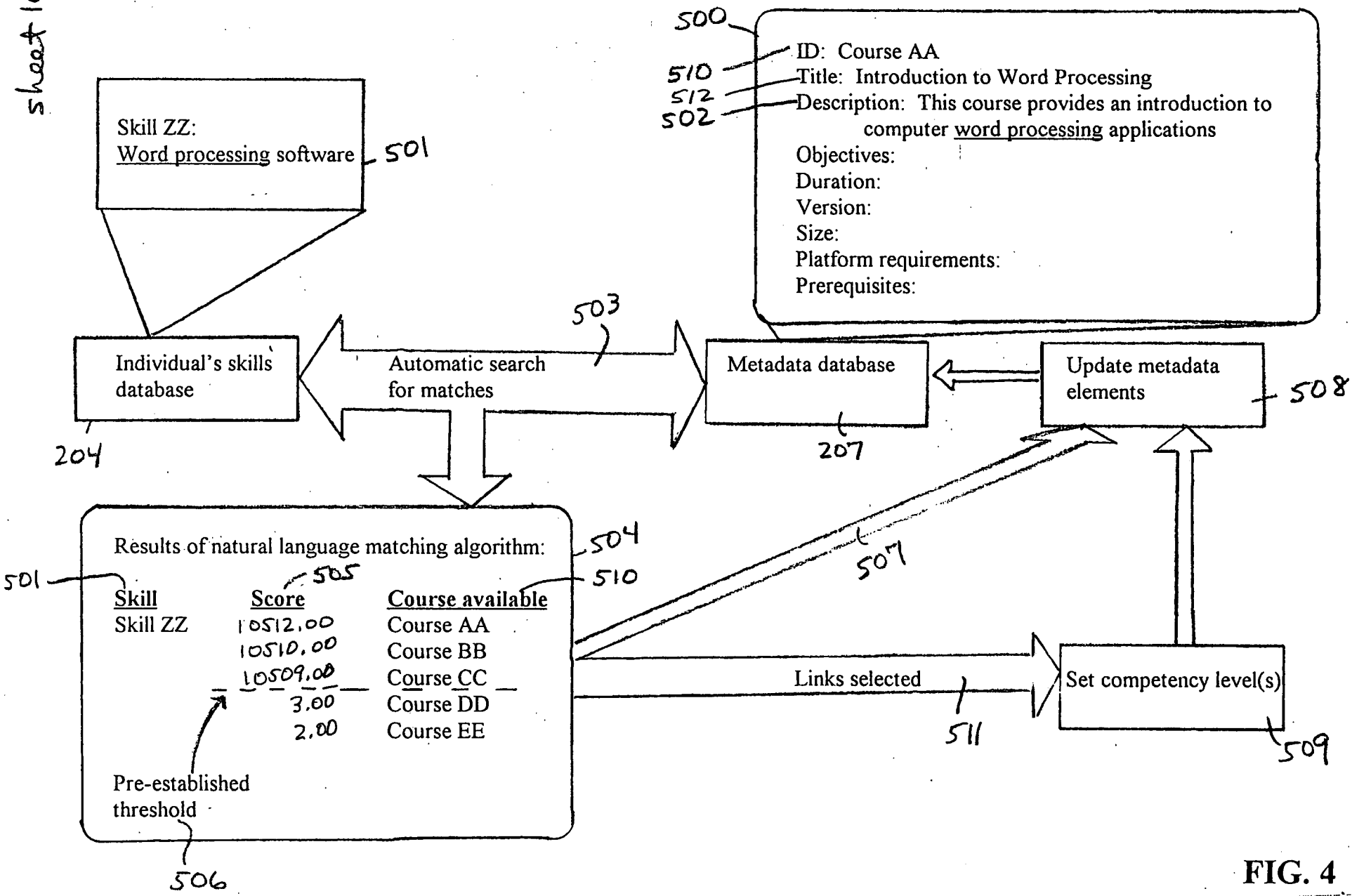

500
ID: Course AA
510
Title: Introduction to Word Processing
512
Description: This course provides an introduction to computer word processing applications
502
Objectives:
Duration:
Version:
Size:
Platform requirements:
Prerequisites:
Skill ZZ:
Word processing software
501
503
Individual's skills database
204
Automatic search for matches
Metadata database
207
Update metadata elements
508
Results of natural language matching algorithm:
504
501
505
510
Skill
Score
Course available
Skill ZZ
10512.00
Course AA
10510.00
Course BB
10509.00
Course CC
3.00
Course DD
2.00
Course EE
507
Links selected
511
Set competency level(s)
509
Pre-established threshold
506

FIG. 4

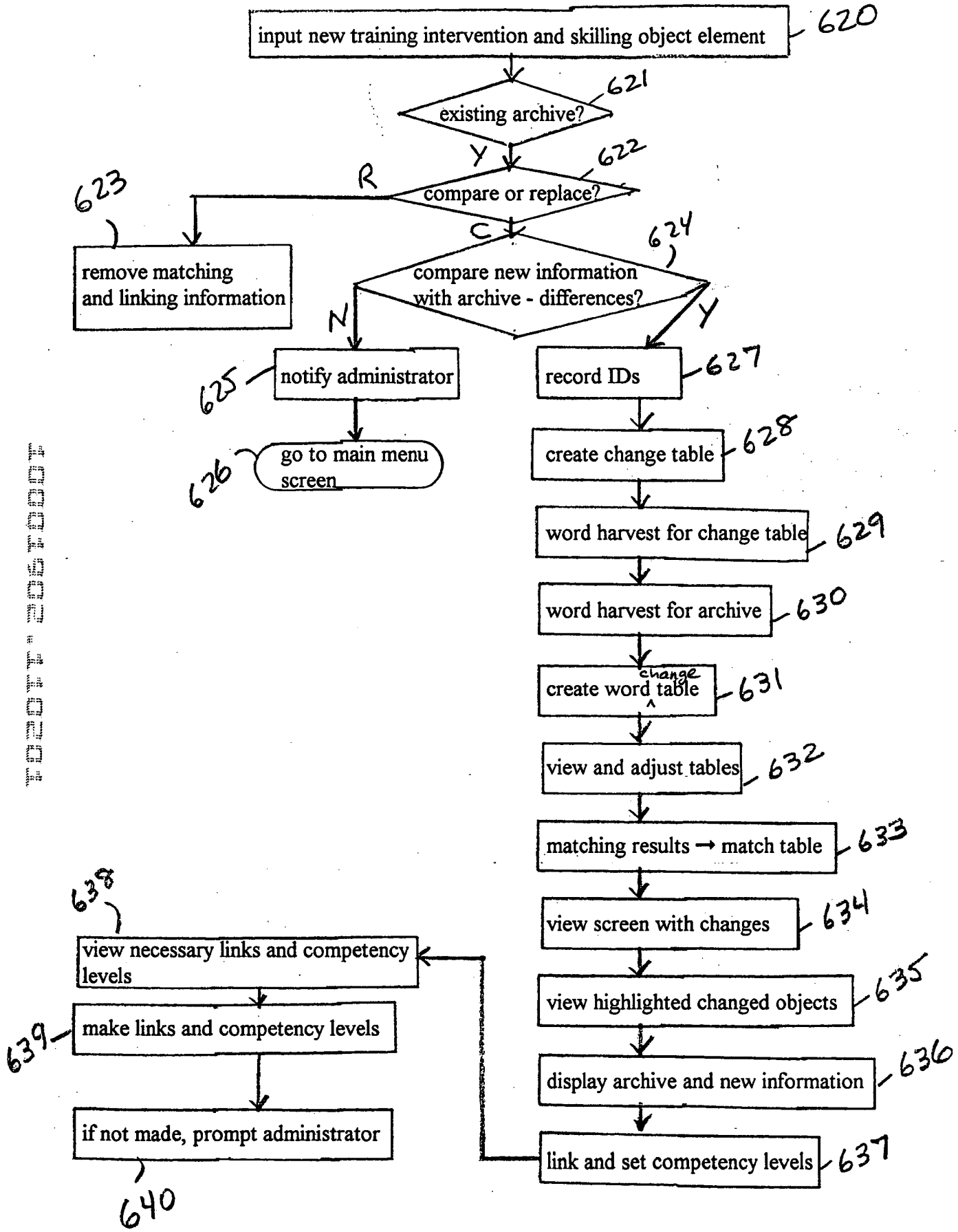

input new training intervention and skilling object element
620
existing archive?
621
Y
compare or replace?
622
R
623
C
remove matching and linking information
compare new information with archive - differences?
624
N
Y
notify administrator
625
go to main menu screen
626
record IDs
627
create change table
628
word harvest for change table
629
word harvest for archive
630
create word change table
631
view and adjust tables
632
matching results → match table
633
view screen with changes
634
view highlighted changed objects
635
display archive and new information
636
link and set competency levels
637
view necessary links and competency levels
638
make links and competency levels
639
if not made, prompt administrator
640

FIG. 5